

**Amendment to the Claims:**

Please amend the claims as follows:

1. (Currently Amended) A method of predistorting an input signal, said method comprising the steps of:  
using at least one outer predistortion function to adjust asaid input signal to produce an outer predistorted signal to be applied to an inner predistortion function; and  
using said inner predistortion function to adjust said outer predistorted signal to produce an inner predistorted signal to be applied to a distortion generating circuit;  
producing said outer predistortion function using said outer predistorted signal and an output of said distortion generating circuit; and  
producing said inner predistortion function using said inner predistorted signal and said output of said distortion generating circuit  
~~adjusting said predistorted signal using said inner predistortion function prior to a distortion generating circuit.~~
2. Cancelled.
3. Cancelled.
4. (Currently Amended) The method of claim 1 further comprising:  
using an amplifier as said distortion generating circuitry.
5. (Currently Amended) A predistortion system comprising:  
a distortion generating circuit; and  
predistortion circuitry adapted to use at least one outer predistortion function to adjust an input signal to produce an outer predistorted signal to be applied to an inner predistortion function, and to adjust said outer predistorted signal using said inner predistortion function to produce an inner predistorted signal to be applied to said distortion generating circuit, wherein said predistortion circuitry is configured to produce

said outer predistortion function using said outer predistorted signal and an output of said distortion generating circuit, and said predistortion circuitry is configured to produce said inner predistortion function using said inner predistorted signal and said output of said distortion generating circuit~~predistorted signal using said inner predistortion function prior to said distortion generating circuit.~~

6. Cancelled.

7. Cancelled.

8. (Currently Amended) The system of claim 51 wherein said distortion generating circuit is an amplifier.